

COATING COMPOSITION

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Abstract

PROBLEM TO BE SOLVED: To obtain a coating composition capable of forming a membrane maintaining high hydrophilicity for a long time even in a dark place, and useful for prevention of dew condensation, fouling, etc., by including a specific photocatalyst parcels, tungsten chloride and tetrahydrofuran.

SOLUTION: This coating composition capable of making the surface of a substrate hydrophilic according to the photoexcitation of a photocatalyst and retarding the decrease in the hydrophobicity when shaded by coating the composition on the substrate and solidifying the coated composition comprises (A) crystalline titanium oxide particles, (B) tungsten chloride and (C) tetrahydrofuran. When the composition coated on the surface of the substrate is fired to solidify the composition, the component B is oxidized by oxygen in air to form (B₁) tungsten oxide. The maintainability of hydrophilicity of the surface layer once made hydrophilic when shaded is improved by the water molecule-adsorbing activities of the component B₁ and the effect is further rapidly increased by the use of the component C as the solvent of the composition.

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